

Yale University

EliScholar – A Digital Platform for Scholarly Publishing at Yale

Yale Medicine Thesis Digital Library

School of Medicine

1-1-1858

Dissertation on lactation

St.-Félix Colardeau

Yale University.

Follow this and additional works at: <https://elischolar.library.yale.edu/ymtdl>




Part of the [Medicine and Health Sciences Commons](#)

Recommended Citation

Colardeau, St.-Félix, "Dissertation on lactation" (1858). *Yale Medicine Thesis Digital Library*. 3797.
<https://elischolar.library.yale.edu/ymtdl/3797>

This Open Access Thesis is brought to you for free and open access by the School of Medicine at EliScholar – A Digital Platform for Scholarly Publishing at Yale. It has been accepted for inclusion in Yale Medicine Thesis Digital Library by an authorized administrator of EliScholar – A Digital Platform for Scholarly Publishing at Yale. For more information, please contact elischolar@yale.edu.

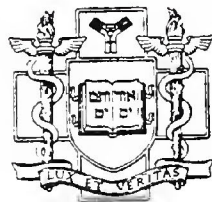


Digitized by the Internet Archive
in 2017 with funding from
Arcadia Fund

https://archive.org/details/thesesformd1842100yale_13

Harvey Cushing / John Hay Whitney
Medical Library

HISTORICAL LIBRARY



Yale University

1858-59



Archives

T113

Y11

1858-1859

Lactation.

Although the name of independent life - has been given to the existence of the new-born infant, yet in a physiological point of view, there remain ties which intermingle still its life with that of its mother. The new being must for sometimes again find the materials of its nutrition in the maternal organism, and when ends the intra-uterine life, nature has already prepared another organ, the function of which is to elaborate a fluid adapted to the nourishment of the infant. This function is termed "lactation".

At the time of child-birth then every thing is marvellously disposed to render the mother able to nurse her child. Her milk is certainly the food the best suited to the infant, it is the only one - nature has provided for it.

Thus; whenever the woman enjoys good health, that no serious disease has diminished her strength, and there is no fear of deleterious hereditary influence, she must, by all means, - answer to the call of nature. A mother does not,

with impunity, give up her rights of nursing; in so doing, she has no regard for the sentiments of her heart, nor the interests of her health or that of her child. She is often the first one punished for the crime which she commits against the new born infant, whom she repels from her bosom, to be given as a victim to all the dangers too commonly attendant upon a hireling nurse. Often have weak and delicate women, grown vigorous and healthy in nursing their child; and how many fine children have, through the tainted lactation of a wet nurse, acquired the seeds of dormant diseases, which manifest themselves in their after-life. We are not to be so exacting regarding mothers, as we should in the case of a wet nurse, as to the strength of the constitution, the qualities of the milk and the development of the mammary glands; for, if the right of nursing their infant was to be granted only to those of superior strength and health, how few women of the world, should be deemed fit for the duties of maternity.

There are however physical malformations

which may render the performance of lactation impossible to the mother. Such is the total absence of the nipples, or again their imperfect perforation. In many other cases, the physician is often called upon to decide whether a pregnant woman will or not be able to nurse her future infant. This oftentimes is a very difficult question to solve. Bearing in mind however, the physical conformation, the state of the constitution, the different modifications to which the mammae have already been subjected, and also the quantity and quality of the sero-lacteal fluid, he may, in a degree, be enabled to give a more or less certain prognosis. For this however no rules can be established, as nature when called upon at the time of need, will often correct to an astonishing degree these very functions which had remained so long impaired by her seeming oblivion. Neither must the physician remain passive, and wait always after the birth of the child, to try to obviate to those imperfections, which make then lactation an impossible thing; while, if they had been taken in time, might have been easily corrected.

Shortness of the nipple is an example. It may be only relative; that is, the nipple may be comparatively not of a sufficient length to be seized readily by the new born child, while an older one could draw the breast without difficulty.

Of all the means used to draw out the nipples, such as repeated titillation of their apices; the application of breast-plates, made of wood or ivory, in which there is an excavation for the insertion of the nipple, which is gradually pressed into it by continued wearing, and thus made to elongate; or again the use of the breast-pump; of all these, direct and often repeated suction is to be preferred. This may be performed by an intelligent nurse or other person; and even, if there was no one obliging enough to do it, by a new born puppy of large kind, taking care to have its paws guarded from scratching. This direct suction is the best, being the most natural; for the groove formed by the tongue against the palate will steady the nipple in all its length much better than the breast-pump, and being moistened by the saliva, it will be rendered more supple and

elongate more easily.

As to the extreme tenderness of the nipples, noticed in some women, especially in primiparae, it also requires some preliminary means to prevent it by hardening them. Tender nipples are generally prevented by the continued use of astringent lotions, or of spirit diluted in water during several months at the end of pregnancy.

By the above means, nursing may be rendered possible and even easy, where without them it would have been perhaps impossible, or at any rate exceedingly painful and tedious to the mother in the beginning.

Let us suppose now that every thing is as it should be, and that the mother is going to nurse her child. Lactation may be here divided into three periods; viz: The first one, which ends at the expiration of the milk fever; the second, after the sixth month; and the third, with weaning.

"The first period" is of very short duration; being, as it were, a transitory stage, between

intra uterine nutrition, during which the infant found in the organism of the mother the nutritive elements already elaborated, and lactation proper during which the child does, it is true, receive still from its mother a special food, but which is - elaborated by its own and independent digestive system, before assimilation.

The phenomena of this period are indeed preparatory on both sides: on the one hand, the milk of the mother loses little by little the characteristics of the colostrum, to be changed in a more nutritive liquid; on the other, the child getting accustomed to the new function, becomes more and more skillful in it, and finds in the liquid furnished to him by its mother the purgative elements which relieve its intestinal canal, and thus prepare it for the digestion of a more substantial food.

At the time of childbirth or about, the colostrum secreted by the mammae is abundant enough for the wants of the child. It could then, if necessary, be immediately put to the breast;

But the mother, whose strength is exhausted by the pains and efforts of labour, is often in so much want of repose and sleep, that it would be unnecessary and even cruel to force her to nurse her child directly after birth. Still, the sooner the child is put to the breast, without too much strain on the strength of the mother, the better; for not only it receives in time a fluid of which the nutritive qualities are perfectly adapted to its intestinal canal, and of which the laxative properties dispense from having recourse to purges, which are generally necessary for the expulsion of the meconium in infants which are fed artificially; but again, the suction made by the child facilitates the secretion of milk, prevents the immoderate swelling of the breasts, the pains which are a consequence of it, and teaches the child to seize by degrees the nipple, which would be much more difficult should the breast be distended when he first tries.

During the first few days, it will be necessary to place the nipple in the mouth of the

child, for it acts only instinctively and blindly on any thing that touches its lips. Care must be taken that the breast does not close the orifice of the nostrils of the child, for not being able to breathe, he will let go the nipple; asphyxiation of the child has even taken place in such cases.

Some children seem not to be willing to nurse, through congenital weakness or a sort of laziness. The mother of such a one must be directed after putting the nipple deep into its mouth, to give such motions to the breast as to tickle its tongue and thus excite that organ to act. She may also press slightly the nipple, that a few drops of milk may flow, or again squeeze from a sponge on the base of it a little sweetened water which penetrating in its mouth will induce the child to swallow.

Owing to the weakness of the new born infant, its first efforts at lactation are attended with much discouragement and fatigue. During the first days, it gives only a few sucking motions at a time, then rests to begin again. Sometimes

after a few efforts, it will fall asleep and will have to be awakened to resume its meal. Some children may thus remain half an hour, and more, at the breast. This may become very fatiguing and tedious to the mother. The generality of French women sit in bed when wishing to give suck, which is without doubt exceedingly tiresome when obliged to remain long in that situation. The American mother avoids this useless fatigue by laying on her side, with the infant against her chest, allowing the nipple to fall naturally in its way.

During the first days, it should be proper to observe whether the child ~~nurses~~ really and swallows the milk. This may be determined by placing the finger over the larynx and the motions which that organ performs during deglutition will be felt if it swallows, and also there may be heard a sort of gurgling sound - caused by the liquid passing from the mouth into the oesophagus.

When the child nurses from the first day, the febrile symptoms of the milk fever are seldom

very violent, and by the repeated suckings of the child the breasts do not generally become distended and painful. At that time however, the quantity of milk in some women is so great, that the glands appear extremely distended and lactation becomes, for the time, more difficult to the infant, and more painful to the mother. Indeed in some, the swelling extends to the axilla, the nipples being sunk and lost in the tumefied parts, far out of the reach of the lips of the child. In such cases, direct suction, or the use of the breast pump is called for to relieve the patient of a part of her milk and at the same time develop the nipples. By diminishing the quantity of the fluid, immediate relief generally follows, the tumefaction disappears, the nipples regain their natural length, and the child nurses with more benefit to himself and less suffering to the mother.

For sometimes, the child taking very little food at a time, it is necessary to put it often to the breast. It is already proper however that there should be some regularity in the time of-

of its meals. A child is always more or less injured by an irregular alimentation, by which there will be sometimes too much intervals between its meals, while at others its stomach will be overloaded by a new quantity of milk before it had time to digest the one just taken. As to the quantity of milk the child should be allowed to take at each time, it ought to be the best judge itself, except in very peculiar circumstances; what would be plenty for some children may be too little for others. The stomach of children besides, having the property of emptying itself of any excess, there is not much harm done in allowing them to take a little more ~~or~~ than is absolutely necessary.

"The second Period" begins after the milk fever, when the breasts have acquired their perfect and active function, in reality it is then that true lactation begins.

Although we do not generally find — during this period the same difficulties as — in the first one, there are still some remarks worthy of notice to be made here.

The first care to be taken before nursing the child, is to know whether ^{it} is really in want of food or not; for never must the breast be given to it for the sole purpose of stopping its cries, as too often do most young mothers. Crying is not always a sign that a child is hungry or in pains. There are some, who cry without any apparent cause, and in spite of their continual agitation and sleepless nights they do not look the worse for it. In order to know by the crying of a child whether it wants nursing, there must be present some other external signs and also attention paid to the time when it nursed last. When the child cries from hunger, it tosses up its arms, turns its head on one side and the other, opens its mouth as if seeking the breast, and sucks greedily on the end of the finger or any other supple and rounded body that should come in contact with its lips.

When the time has come, the mother holding the child in her arms, resting its head ^{on} one of them, places the nipple in its mouth, pressing slightly

on the areola with her fingers in order to squeeze out a little milk, and let it know in that way that it may nurse profitably. These precautions are required only for the first few weeks, as — the child soon learns how to act for itself and sometimes seizes the nipple with so much vivacity as to make it very painful to the mother. In some cases indeed, far from exciting it, it becomes necessary to check its ardor by withdrawing the breast from it now and then as must be the case when it has not nursed for a long period and that it is swallowing too fast and too greedily.

As much as possible the mother must alternate her breasts in giving suck, in that way they are equally emptied, and there is a longer time of repose given to each nipple. It often happens that a child seems to have a marked preference for one breast and is reluctant to nurse on the other side. The disdained breast must always in such cases, be persistently offered to it, whenever the time has come for it to be

nursed from. This is still more easily accomplished, if at each meal the mother should nurse her infant from the two breasts; beginning always, while it is most hungry, by the one it likes the best. Hunger will induce it to suck, and after a little hesitation, it will nurse well from the side, which it should have refused if it had been offered to it last.

In "the third Period" it is intended to withdraw the child little by little from its maternal food; to teach it to feed on all sorts of aliments, and in a word to give it an independent existence. The question then is to know: when it is proper to begin adding other food to the milk of the mother, and — when lactation should cease entirely.

In France, the country nurses are in the habit of feeding children, when only eight days old, on pap made of fine wheat flour and cow's milk; they do so in the belief that this aliment prevents those colics to which new-born infants are so subject. It is certain

however that the paps and soups given to infants, in some countries, almost immediately after birth, besides the milk of the mother or nurse, are, to say the least, useless if not often dangerous. The child who partakes only of its mother's milk, provided it is rich and plentiful and given at regular intervals, does not suffer often from colics and wind in the stomach, as it is called.

As much as possible, if the mother is a good nurse and bears well the fatigues of lactation, her breast must be enough for her child during the first six months. After this time, some light food may be gradually added to the milk of the mother; the feculent substances are to be preferred, such as wheat flour, arrow-root &c. Baked wheat flour — cooked with milk is one of the best preparations, as it contains much gluten and is very nourishing. As to the quantity given each time, it should be little at first, and gradually increased, as the child grows older and diminishing at the

same time its usual allowance of maternal milk.

This gradual diminution accustoms the child little by little to be away from the breast, develops its taste for extraneous food, while on the other side it diminishes the secretion of milk and renders weaning much easier for the child and less painful to the mother.

The natural time for weaning a child seems to be when the first dentition is completed; it is only then that the child possesses all the organs necessary to the mastication and insalivation of its aliments. But this first dentition often is not completed before two years or two years and a half, and it is very seldom that a child has not been entirely deprived of the milk of its mother before that time. In fact, it is probable, that the mother could not bear well such a prolonged lactation, and that her milk should lose its good qualities; besides, there comes an age when children themselves seem to want a more substantial food.

When the child has been accustomed by

by degrees to partake of some other light food, there is no difficulty in weaning it, and this may be generally accomplished without illconsequences as soon as dentition is pretty well advanced. As a general fact, it is not before the child has eight or ten teeth that it should be weaned, consequently not before the twelfth or sixteenth month. It must be borne in mind here, how important the milk of the mother is during the pains of difficult dentition; the child often refusing then to take any other food, while it is almost always willing to nurse, it should become very difficult to feed it if it had been weaned already.

It is useful to know that the teeth are growing by groups. During one of these dental eruptions the child is generally sick: there is fever, cough, diarrhoea; but this over, it gets well with an almost astonishing rapidity, and this succession of sickness and health takes place more or less in every child. It is then evident, that a favorable time for weaning it, should be

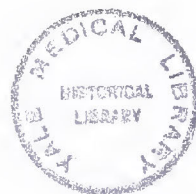
chosen directly after one of these dental eruptions, as then there will be a few months of repose during which the child will be in good health and will better bear a change in its diet.

When it is decided to wean the child, it is better to do it all at once, and not allow the child to nurse now and then, because it should cry much. Some of the European writers advise to wean during spring or summer; but according to American authors, winter seems to be preferable in this country: summer being objected to, on account of the remarkable prevalence of cholera infantum, in the United States, at that season of the year.

It would be well perhaps that, while weaning, the child should be committed to the care of another person; if this is not practicable, it will be advisable to disgust it with the breast, by placing on the nipple some substance of disagreeable taste or smell, such as Aloes, Mustard or Peruvian bark. These generally succeed, and most children after having tasted or even smelled them once, reject with disgust the breast of their mother, whenever

it is offered to them afterwards.

J. H. Colardeau



YALE MEDICAL LIBRARY



3 9002 08670 4765

Accession no. 23005

Author Yale University.
Therese M. Doctor
of Medicine

Call no. Archives

T113

v11

1858-9

